

Notice of Allowability

Application No.

09/823,263

Examiner

Wills M Monique

Applicant(s)

MARVIN ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed December 22, 2003.
2. ☒ The allowed claim(s) is/are 1,3-8 and 10-18.
3. ☒ The drawings filed on 23 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Fred Pruner on March 12, 2004.

The application has been amended as follows:

In claim 14, line 7: After "load through a diode", insert "a current sensor to indicate a current through a fuel cell stack of the fuel cell subsystem; and a circuit coupled to the current sensor to monitor cell voltages of said fuel cell stack, determine the minimum of the cell voltages and prevent the current from exceeding a maximum threshold current based on the minimum cell voltage".

In claim 15, line 9: After "based on the monitored power", insert "a current sensor to indicate a current through a fuel cell stack of the fuel cell subsystem; and a circuit coupled to the current sensor to monitor cell voltages of said fuel cell stack, determine the minimum of the cell voltages and prevent the current from exceeding a maximum threshold current based on the minimum cell voltage".

Examiner's Statement of Reasons for Allowance

The following is an examiner's statement of reasons for allowance: claims 1, 14 & 15 are allowable over the prior art or record, because the prior art is silent to a fuel cell system comprising: a fuel cell; supplemental power; and a circuit coupled to a current sensor to monitor cell voltages of said fuel cell stack, determine the minimum of the cell voltages and prevent the current from exceeding a maximum threshold current based on the minimum cell voltage.

Claim 8 is allowable over the prior art or record, because the prior art is silent to a method comprising: using a fuel cell stack to furnish power to a load, selectively connecting and isolating a battery to the load based on a response of the fuel cell stack; and preventing current of the fuel cell stack from exceeding a maximum threshold current based on the minimum cell voltage.

The remaining claims are allowable based on their dependency, directly or indirectly, to the independent claims above.

The prior art, such as Lacy et al. 6,428,917, teaches a fuel cell system comprising a fuel cell subsystem, battery and circuit to determine the minimum of the cell voltage. The reference does not anticipate the instant claims because it is silent to a first circuit adapted to selectively connect the battery to the load and isolate the battery from the load based on a response of the fuel cell subsystem change in power. The reference is not prior art for the purposes of 35 U.S.C. 103(a). More specifically, 35

Art Unit: 1746

U.S.C. 103(a) states that subject matter developed by another which qualifies as prior art only under 102(e) is not applied as prior art provided that the subject matter and the claimed invention were commonly owned at the time the invention was made M.P.E.P. 2146. In the instant case, the subject matter disclosed in Lacy and the instant application were both owned by Plug Power, Inc. at the time the claimed invention was made. Applicant has provided a copy of the Notice of Recordation of Assignment, showing ownership of the present application by Plug Power Inc.

Conclusions

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

Art Unit: 1746

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Randy Gulakowski, may be reached at 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mw

03/12/04

Bruce Bell
BRUCE F. BELL
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